THE TECH

SENIOR WEEK ISSUE

VOL. XXIX. NO. 166. BOSTON, MASS., MONDAY, JUNE 6, 1910 PRICE FIVE CENTS

GRADUATION

At 11 o'cock Tuesday the candidates for degrees will assemble in Huntington Hall to receive their instructions for the afternoon. The exercises will start at 2 P. M. and will be begun by the reading of theses by the following men:

Course I.—R. M. Gillis, A.B. A Design for a Storage Reservoir on the Deerfield River.

Course II.—R. A. D. Preston. Power Plant Test and Furnace Temperatures on the Oil-burning S. S. Oklahoma.

Course III.—W. B. Hargraves. A Report on the Marsboro Goldmine and Cynaid Treatment of a Silver Ore from Cobalt, Ontario.

Course IV.—W. S. Davis. A Design of a Social Center for the City of Los Angeles.

Course V.—G. R. Lord, B.A. An Investigation into the Effects of Iron-treated and Alum-treated Waters upon Distributing Pipes.

Course IV.—G. S. Humphrey. Voltage Regulation of Alternators.

Course VII.—H. L. Lang. A Quantitative Comparison of the Cellular Contents of Fresh Milk by two Distinct Methods.

Course X.—G. P. Lunt. A Process for the Manufacture of Lactic Acid and Calcium Lactate.

Course XI.—S. A. Malcom. Design for a Sewage Disposal System at Manchester-by-the-Sea.

Course XIII.—G. G. Holbrook. Power Tests of a Steamer and its Model.

Cousse XIV.—R. H. Lombard. On the Equilibrium of the System Consisting of Calcium Cyanamid Calcium Carbide Carbon, and Nitrogen.

The theses of Mr. Preston and Mr. Holbrook will be illustrated by Lantern Slides.

The President's address comes next, and then the degrees will be conferred. After this President and Mrs. Maclaurin and Mrs. Rogers will receive in the General Library.

SENIOR DINNER

It was a happy crowd of Seniors that met at the American House Thursday evening for the final Senior Dinner. With exams, studies, and all their troubles behind them, they enjoyed the occasion as they never had enjoyed a dinner before. From the time the men sat down at the tables, the singing began, and various course cheers were given. The entrance of a newspaper reporter was the signal for the first bread-throwing, which continued for a considerable part of the time. All was well until some bright intellect discovered a powerful arsenal in the bowls of lump sugar, and soon caused a general firing of lump sugar, which had to be stopped by the management. The chairman of the dance committee and the first marshall had announcements to make which they succeeded finally in making, after quieting the unearthly racket, the marshall being made to stand on a chair.

By half-past eight the joyful throng was ready to adjourn for Rogers building, and started out. One crowd chartered a cab, piling nine men into it, others rode in equally crowded taxis, but the main body marched in colmns of fours, singing and yelling. In Rogers corridor they were arranged in order of courses and alphabetically. It was a yelling, howling mob that formed in line, but if they were noisy before entering the office they were quiet compared with the Bedlam let loose that came out of the office. The men yelled, sang, danced, shook hands, and hugged each other, jumping up and down and throwing up hats, making the corridor of stern old Rogers building a sight for gods and men. There were no strangers in that crowd. Everybody shook hands with everybody else, slapped each other on the back,

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CLASS DAY EXERCISES

About 650 people attended the Class-day exercises in Huntington Hall and on the lawn this afternoon. At 2.30 Pres. R. F. Goodwin began the exercises by introducing the first marshal, F. Bell, who then took charge of the proceedings. In his speech Mr. Bell laid special emphasis on the point that the class owed a distinct duty tothe Institute as Alumni. He said:

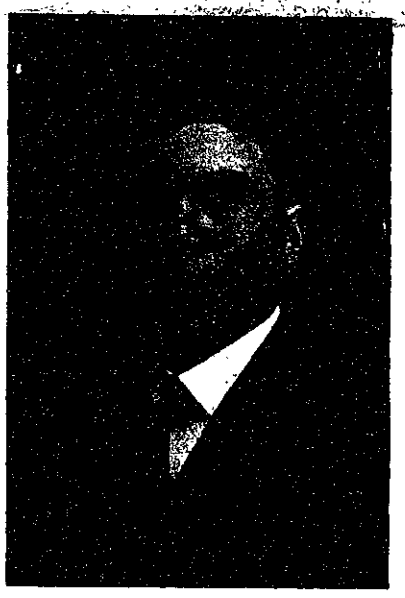
Ladies and Gentlemen:—

This gathering today represents the final opportunity that the Class of 1910 will have to extend to you, its friends, that hospitality and spirit of good fellowship which we hope is, and ever will be, always a part of us. As our President has said, we wish you to join in and help us celebrate, to be one of us, and to make merry wth us. Imagine, if you will that my greeting to all of you is just as cordial as it would be if I could shake hands with each one of you.

However, Class Day, besides being an occasion of festivity has its serious aspect, its reflections on the past, its hopes for the future, and above all, the thought of what spirit and enthusiasm we may show as alumni.

Naturally, at such a time as Class Day, our reflections take us back to by-gone years. How well rememberd are those freshmen days; those days of happy boyish enthusiasm. How vivid are the petures of our successes and failures, of class gathering, of memorable incidents which bound us together.

We think of our former President, Doctor Noyes, of his quiet, self-sacrific-



FRANK FREDERICK BELL
First Marshall

ing perseverence for the Institute's welfare, and of that love and respect which exists for him in the student body. Our class has been fortunate too in seeing President Maclaurin take up his work with a spirit and enthusiasm which is causing the student as well as the alumnus to feel the spirit of a "NEW TECH" within him which is there to stay, and which indicates his hearty support and indorsement of the President's policies.

We who have passed through these changes can well appreciate the future for the student as well as the future for the Institute. The growing tendency towards the indorsement of athletics and the growing interest which is being shown in various student activities indicates a new phase of development in Institute life. Such a growth means that future outgoing classes must have for Tech an increased love and enthusiasm.

But today is our last social gathering before being received into the ranks of Alumni. Our four years of guidance and training have left us ready to go

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COMMENCEMENT REUNION

The Annual Commencement Day Reunion of the Technology Alumni will be held this year as usual on Tuesday, June 7. A number of the classes will hold dinners at about this time, and all the alumni will take part in the two big events of the Reunion—the informal Spread and Smoker in Horticultural Hall, and Tech Night at the Pops, Symphony Hall. Applications have come in from all over the northeastern part of the country, and the indications are that the attendance, while not comparable with that at the big Five-Year Reunions, will surpass that of previous intermediate years.

The Spread will last from 5.45 to 7.45 and will give an excellent opportunity for men to meet their class-mates under the class banners, with which Horticultural Hall will be decorated, and for the members of the graduating class to become acquainted with the Alumni. A choice menu will be served, together with cigars and cigarettes, and an excellent punch.

Tickets at $1.00 may be had by application at the Alumni Office, 37 Rogers, or at Horticultural Hall on the evening of the Spread. The menu will be as follows:

Beef Croquettes with Peas
Salmon Salad
Rolls
Assorted Cakes Strawberries
Ice Creams
Bombe Glace Neapolitan
Chocolate Vanilla Strawberry
Mixed Ice Creams and Sherbets
Coffee
Cigars Punch Cigarettes

The whole of Symphony Hall has been bought by the Alumni Association for Tech Night at the Pops. Tech banners and electric signs, Tech napkins on the tables, and class pennants marking the location of the different classes on the floor will constitute the decorations. Most of the house has already been sold to Alumni on application, but there are still some seats left in the rear of the first balcony, and in the second balcony, and there is always room to pack a few more on the floor. Tickets at 75 cents for balcony seats and $1.00 for floor seats, may be obtained by former students or undergraduates at 37 Rogers, and any balcony seats left will be put on sale at Symphony Hall the evening of the concert.

The program will be more than ever typical of Technology Night, for in addition to the Tech Show music and the Tech songs led by the Glee Club, the Glee Club will present one number of the program themselves. Mr. Maquare, who has just succeeded Mr. Strube as conductor of the Pops, will conduct for the first time at a College Night, and he has arranged a program that shows how thoroughly he is in sympathy with the spirit of the evening. The program will be as follows:

1. Waltz. "Espana." Waltenfel
2. (a) March, "Stars and Stripes," Sousa
   (b) Dear Old M. I. T. (with Glee Club). H. S. Wonson, '07
3. Czarina, Ganne
4. Selection. "Three Twins." Hosna
5. Selection from "The Queen of the Cannibal Isles," Tech Show, 1910
6. March. "Teddy's Return." Andre Maquare
7. (a) "The Bill of Fare," Zollner
   (b) "Doan' You Cry, Ma Honey." (Glee Club). Foster
8. Selection. "Mlle. Modiste." Herbert
9. (a) "On Rogers Steps" (with Glee Club). T. W. Estabrook, '05
   (b) Stein Song (with Glee Club). Frederick Field Bullard, '87
10. Waltz. "Grubenlichter." Zeller

(Continued on page 90, column 1.)

CANDIDATES FOR DEGREES AND TITLES OF THESES

Candidates for Degrees in the Several Courses of Study with Titles of their Graduation Theses.

Candidates for the Degree of Doctor of Philosophy—Charles Horace Class, B.S., South Boston. The Ingeous Rocks in Essex County, Massachussetts.

Richard Chace Tolman, S.B., West Newton. The Electromotive Force Produced in Solutions by Centrifugal Action.

Candidates for the Degree of Doctor of Engineering.—Harold Smith Osborne, S.B., Cambridge. An Investigation of the Potential Stress in Dielectries.

Candidates for the Degree of Master of Science.—Lee Scott Border, U.S.N., Webster, Iowa. Alternating Current versus Direct Current for Installation in Naval Vessels. (With A. J. Chantry, Jr.)

Harold Du Pre Bouneteau, S.B., Jacksonville, Fla. A Design for a Museum Library.

Allan J. Chantry, Jr., U.S.N., Charlestown. A Comparison of the Observed and Calculated Deflection of a Watertight Bulkhead.

Philip Joseph Cyr, B.S., Fowler, Ind. A Sewage Disposal Plant for Brockton, Massachusetts.

Edwin Oberlin Fitch, Jr., U.S.N., Brookline. Progressive Speed-trials of a U.S.N. Standard Steam Cutter. (With R. B. Hilliard.)

James Orville Gawne, U.S.N., Fredonia, N. Y. Strength of Bulkhead Stiffness under Water Pressure.

Harold Metcalf Glazier, S.B., Hudson. A Design for a Museum-Library.

Robert Bell Hilliard, U.S.N., Newton Centre. Progressive Speed-trials of a U.S.N. Standard Steam Cutter. (With E. O. Fitch, Jr.)

Arthur Thacher Hinckley, S.B., Roslindale. The Theory and Practice of Casehardening.

Reginald Lamont Jones, R.B., West Somerville. The Effects of the Heat History of Silicon Steel on its Magnetic Properties.

Alfred Galpin Kellogg, S.B., Brookline. A Design for a Museum-Library.

Lester Hazen King, S.B., Hartford, Conn. A Design for a Museum-Library.

Rolando Arnoldo Martinez, S.B., Havana, Cuba. A Study of the Relative Importance of Secondary and Primary Stresses in Common Types of Bridge Trusses.

Charles Alexander Robb, B.Sc., Wallace, Nova Scotia. The Design of a Producer Gas-power Plant, with Devices for Utilizing the Exhaust Heat.

Franz Schneider, Jr., S.B., Lawrence. On the Mortality Statistics of Industrial Hygiene in the United States.

John Calvin Sweeney, Jr., U.S.N., Paris, Tenn. Gasoline Engines for Naval Installation.

Kurt Vonnegut, S.B., Indianapolis, Ind. A Design for a Museum-Library.

Laurence Somerby Winchester, S.B., Reading. An Experimental Investigation of the Strength of Cedar and Chestnut Poles.

Candidates for the Degree of Bachelor of Science:

COURSE I. CIVIL ENGINEERING.

John Ahlers, New York, N. Y. A Design for a Sewerage System for Ashland, Massachusetts. (With R. A. Snead.)

Abbott Allen, Dorchester. A Design for a Highway Crossing over the Neponset River at Neponset, Massachusetts. (With E. S. Clark.)

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THE TECH

Published daily, except Sunday, during the college year by students at the Massachusetts Institute of Technology.

Entered as second-class matter, Sept. 29, 1910, at the post office at Boston, Mass., under the Act of Congress of March 3, 1879.

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Office 42 Trinity Place.
Telephone, Back Bay 2184.

All communications should be addressed to the proper departments.

Subscriptions $1.50 per year in advance. Single copies 1 cent.
Subscriptions within the Boston Postal District and outside of the United States must be accompanied by postage at the rate of one cent a copy.

Printed by Puritan Linotype, Boston.

BOSTON, MASS., JUNE 6, 1910.

COMMENCEMENT REUNION.

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11. (a) "Take Me Back to Tech". (with Glee Club),
I. W. Litchfield, '85
(b) "The Cardinal and the Gray" (with Glee Club),
Bryant and Moody, '07
12. American Fantasy, Herbert

The feature of the evening will be the reception of the Class of 1910 into the Alumni body. The concert will begin at eight, and immediately after the overture the graduating class will march into the hall. At the center of the hall they will be met by the president of the Alumni Association, who will greet the Class President, and present him with the vertically striped Alumni banner in exchange for the horizontally striped undergraduate one. A novel surprise of welcome has been planned by the committee in charge.

After this reception, the seniors will continue their march to the tables reserved for them at the front of the hall, and fun, good fellowship and Technology spirit will reign supreme.

The committee in charge of the Pops (G. B. Glidden, '93, chairman, H. S. Mork, '99, and M. R. Scharff, '09), assisted by nine aides, will be on hand to see that everything goes through without a hitch. They are especially anxious to prevent all cheering during the musical numbers and to have every one join heartily in the Tech songs, and in the cheers between the numbers; they hope to have the co-operation of all in making this thirteenth annual Tech Night in every way a credit to the name of Technology.

SENIOR DINNER.

(Continued from page 89.)

and tried in every possible way to work off the surplus joy coming from the knowledge of four or more years of hard work successfully completed.

The telegraph offices were crowded with men with flushed and happy faces, hoarse voices, and dilapidated head gear, eager to spread the joyful news. The men then went their ways and celebrated according to their desires.

GRADUATES

(Continued from page 89.)

Albert Willard Andrews, A.B., Canandaigua, N. Y. A Preliminary Investigation to Determine the Hydraulic Power Available on the Green River, at Williamstown, Massachusetts. (With R. P. Walker.)

William Clark Arkell (Canajoharie, N. Y. A Study of the Methods of Constructing Foundations for High Office Buidings.

Kenneth Potter Armstrong, Somerville. A Study of the Economic Principles Involved in the Relocating an Interurban Railway.

John Brazer Babcock, 3d, Dorchester. An Investigation of the Strength of Yellow Pine Ties for use on Railroad Bridges. (With A. B. Henderson.)

Albert John Beach, Somerville. A Design for a Bridge over the Charles River near the Harvard Stadium. (With W. K. Brownell.)

Van Zandt Beall, B.S., Fort Worth, Texas. A Study of the Effect of Loam on Cement Mortar and Concrete. (With F. F. Bell.)

Carroll Roland Benton, Manchester, N. H. A Study for the Location of an Outfall for the Sewerage System of Gloucester, Massachusetts.

Walter Keith Brownell, Brookline. A Design for a Bridge over the Charles River near the Harvard Stadium. (With A. J. Beach.)

Eugene Olaf Christiansen, Jamaica Plan A Design for a Highway Crossing over the Neponset River, at Neponset, Massachusetts. (With A. Allen.)

Samson Kalmon Cohen, Roxbury. A Design for a Highway Bridge.

Alton Mace Cook, Hyannis. A Study of Methods of Waterproofing Engineering Structure.

Michael Abram Coplan, Roxbury. A Design for a Moving Sidewalk from Park Street to the South Station, Boston.

Harold Neff Cummings, A.B., Auburn, Me. A Comparison of the Strength of Coke-Breeze Concrete and Broken-stone Concrete. (With G. L. Mylchreest.)

John Christopher Diehl, B.S., New Oxford, Pa. A Study of the Economy of Reducing the Helper-Grade at Horn on the Renovo Division of the Pennsylvania Railroad.

Herbert Schumann Dornberger, A.B., Pittsburgh, Pa. A Design for a Spandrel-Braced Three-Hinged Arch Bridge.

John Moxcey Fitzwater, Penn Yan, N. Y. A Study of the Possibilities of Water-Power Development near Wayne, New York. (With P. D. Terry.)

Arthur John Foote, Pittsfield. A Design for a Storage Reservoir on the Deerfield River. (With R. M. Gillis.)

Ridgway Mills Gillis, A.B., Walla Walla, Wash. A Design for a Storage Reservation on the Deerfield River. (With A. J. Foote.)

Leslie William Greely, Muncie, Ind. A Design for a Reinforced Concrete Trestle.

Achilles Hadja Savva, A.B., Baffra, Turkey in Asia. An Investigation of the Water Supply System of the Town of Cochituate, Massachusetts, with Reference to Adequacy for Fire Protection. (With O. S. Smith.)

Austin Brown Henderson, Beverly. An Investigation of the Strength of Yellow Pine Ties for use on Railroad Bridges. (With J. B. Babcock, 3d.)

Elmer Jacobs, Needham. A Plan for a Proposed Concrete Arch Railroad Bridge over the Charles River at Charles River Village, Massachusetts.

Gorton James, A.B., Brookline. An Investigation of Rate Making for Public Water Supplies. (With J. Lodge.)

Charles Frederick Joy, Jr., Chelsea. An Investigation of Bridge Failures.

Philip Gustave Laurson, B.S., Mitchell, S. Dak. A Design for a Concrete Dock at South Boston, Massachusetts. (With A. B. Merry.)

Lasley Lee, Carbondale, Pa. An Investigation of the Efficiencies of Different Types of Anchorages of Steel Rods in Concrete. (With L. O. French.)

John Lodge, A.B., Media, Pa. An Investigation of Rate Making for Public Water Supplies. (With G. James.)

Carl Howard Lovejoy, Dorchester. A Design for a Reinforced Concrete Water Tank and Tower.

Manson Ainslie Lyons, Parrsboro, Nova Scotia. Rating of a Fire Nozzle Metre. (With M. S. Tod.)

Austin Blake Mason, A. B., Boston. A Study of the Power House at the Outlet of Sebago Lake, Maine.

Clarence Dickinson Maynard, Somerville. A Design for a Spandrel Braced Two-Hinged Steel Arch Railroad Bridge.

Murray Homan Mellish, Malden. A Study of Various Types of Movable Dams.

Augustus Bradford Merry, Vineyard Haven. A Design for a Concrete Dock at South Boston, Massachusetts. (With P. G. Laurson.)

George Lewis Mylchreest, B.S., Middletown, Conn. A Comparison of the Strength of Coke-Breeze Concrete and Broken-Stone Concrete. (With H. N. Cummings.)

Manuel Adrian Navarro, Quito, Ecuador. A Design for a Two-Hinged Steel Arch Highway Bridge.

Harold Frank Parsons, Gloucester. A Study for the Location of an Outfall for the Sewerage System of Gloucester, Massachusetts. (With C. R. Benton and and J. H. O'Neill.)

Earl Wellington Pilling, Danielson, Conn. A Design for a Reinforced Concrete Bridge across the Charles River at West Roxbury. (With O. R. Rietschlin.)

Floyd Jacob Pitcher, Somerville. Tests of a Humphrey Turbine. (With P. W. Taylor.)

Otto Rheinhard Rietschlin, Jamaica Plain. A Design for a Reinforced Concrete Arch Bridge across the Charles River at West Roxbury. (With E. W. Pilling.)

Read Isbell Ripley, Malden. Design of a Hydro-Electric Power Plant.

Louis Griffin Rowe, Gloucester. A Study of Breakwater Designs.

Harold Sharp, Nantucket. A Discussion of the Changes in the Houlover Beach at Nantucket, Massachusetts, with Designs for an Artificial Cut through the Beach.

Henry Lancey Sherman, Pasadena, Cal. A Study of the Water Works of the City of Hartford, Connecticut.

Ralph Amsden Sinead, B.S., Greenfield. A Design for a Sewerage System for Ashland, Massachusetts. (With J. Ahlers.)

Otis Sanborn Smith, Laconia, N. H. An Investigation of the Water Supply System of the Town of Cochituate, Massachusetts, with Reference to Adequacy for Fire Protection. (With A. Hadji Savva.)

Frank Griffiths Taite, Merion, Pa. A Design for a Highway Bridge with Reinforced Concrete Girders.

Philip Weston Taylor, Arlington. Tests of a Humphrey Turbine. (With F. J. Pitcher.)

Philip Dunbar Terry, Waterville, N. Y. A Study of the Possibilities of Water-Power Development near Wayne, New York. (With J. M. Fitzwater.)

Rafael Joaquin Torralbas, C.E., B.S., Havana, Cuba. A Design for a Three-Hinged Reinforced Concrete Arch Highway Bridge.

Richard Gaines Tyler, C.E., Waco, Texas. A Design for a Division Gate for a Diversion Canal.

William Ratcliffe Waldo, Winthrop. Tests upon the Crushing Strength of I-Beam Webs. (With R. P. Watson.)

Robert Pettit Waller, A. B., Bloomsburg, Pa. A Preliminary Investigation to Determine the Hydraulic Power Available on the Green River, at Williamstown, Massachusetts. (With A. W. Andrews.)

Richard Parker Watson, Roxbury. Tests upon the Crushing Strength of I-Beam Webs. (With W. R. Waldo.)

Robert Pettit Waller, A. B., Bloomsburg, Pa. A Preliminary Investigation to Determine the Hydraulic Power Available on the Green River, at Williamstown, Massachusetts.

Waldo Cornell York (Of the class of 1909), New Bedford. An Experimental Determination of the Coefficient of Friction in Opening the Sluice Gates of the Charles River Dam.

COURSE II. MECHANICAL ENGINEERING.

Roy Horsford Abbe, Bethlehem, N. H. Investigations of an Inertia Governor. (With L. E. Briggs.)

Leon Myer Adler, Birmingham, Ala. Calculation of a Reaction Steam Turbine. (With H. W. Flickinger.)

Raynor Huntington Allen, Cincinnati, Ohio. A Determination of the Losses in Transmission, the Propellor Shaft, and the Rear Axle of an Automobile.

Frank Adams Baker, Dorchester. Investigations of a Westinghouse Le Blanc Condenser. (With A. G. Batsner.)

George Ellinwood Batcheller, Mount Vernon, N. Y. A Plan for Hydro-Electric Deveopment on the Souhegan River at Merrimack, New Hampshire. (With A. L. Fabens, A. P. Truette, and D. V. Williamson.)

Alexander Graydon Batsner, Cincinnati, Ohio. Investigation of a Westinghouse Le Blanc Condenser. (With F. A. Baker.)

Charles Johiah Belden, Ross, Cal. Investigations on a Knox Automobile Engine. (With H. G. Hawes, Jr.)

Frank Frederick Bell, Bristol, Pa. A Study of the Effect of Loam on Cement Mortar and Concrete. (With V. Z. Beall.)

Leroy Edmund Briggs, Providence, R. I. Investigations of an Inertia Governor. (With R. H. Abbe.)

Dallas Brown, Jr., New Bedford. Comparative Wearing Tests on Different Makes of Globe and Gate Valves.

Charles Donald Carey, A.B., Stroudsburg, Pa. Holding Power of Boiler Tubes in 1-2 in. Plate.

Orrin James Crommett, Critical Speeds of Rotating Shafts with Varying Loads.

Frederick Archibald Dewey, Huntington, L. I. A Study of an Emerson Steam Pump.

Robert Emmett Dillon, Belchertown. An Investigation of the Losses in a Power Plant. (With R. J. Haley.)

Charles French Doble, Quincy. Comparison of the Running Properties of Three Types of Involute Gears. (With C. E. Green.)

Walter Remy Dray, B.A., Chicago, Ill. Corburetion.

Charles Alexander Dunkel, Rosindale. A Study of the Steam Distribution and Therma Efficiency of a Water Gas Plant. (With H. C. Perley.)

Andrew Lawrie Fabens, A.B., Williamstown. A Plan for Hydro-Electric Development on the Souhegan River at Merrimack, New Hampshire. (With G. E. Batcheller, A. P. Truette and D. V. Williamson.)

Harrison William Flickinger, Brookline. Calculation of a Reaction Steam Turbine. (With L. M. Adler.)

Louis Osborne French, Milwaukee, Wis. An Investigation of the Efficiency of Different Types of Anchorages of Steel Rods in Concrete. (With L. Lee.)

Charles Edward Green, Dorchester. A Comparison of the Running Properties of Three Types of Involute Gears. (With C. F. Doble.)

Henry Appleton ale, Jr., Salem. An Investigation of the Variations in Count and Twist of Standard Cotton Yarns.

Ralph Jandt Haley, A.B., Sioux City, Iowa. An Investigation of the Losses in a Power Plant. (With R. E. Dillon.)

John Kearsley Mitchell Harrison, Brookline. Design, Construction and Testing of an Apparatus for Determining the Power Transmitted by a Belt, Operating on the Principle that the Rate of Vibrations of the Belt is Dependent on the Tension.

Philip Hart, Portland, Oregon. A Study of the Thermal Conductivity, both Absolute and during Fire Tests, of Stone and Cinder Concrete.

Henry Gordon Hawes, Jr., A.B., Santa Barbara, Cal. Investigations on a Knox Automobile Engine. (With C. J. Belden.)

Mayo Dyer Hersey, A.B., West Hartford, Conn. Journal Friction and Carrying Power.

Clifford Chase Hield, Minneapolis, Minn. Speed Trials and Service Test on the Steamboat Whitebear.

Roger Frank Hill, B.S., Tilton, N. H. A Method of Proportioning Concrete. (With H. C. Manson.)

Alexander Freeman Jackson, Milford. Test on a Radial Valve Engine and D. C. Thompson-Ryan Generator. (With C. M. Smith.)

Bradley Jones, Winthrop. Design of a Low Pressure Steam Turbine.

Harold Lockett, Chicago, Ill. An Investigation of Spray Nozzles. (With M. W. Tilden.)

George Hugh Magee, South Groveland. A Study of Wool Drying with a View to Improving the Efficieney and Economy of Methods.

Harold Crosby Manson, Dorchester. A Method of Proportioning Concrete. (With R. F. Hill.)

Thorndike DeVries Martin, Brighton. An Investigation of a Dodge Steam Flow Meter. (With E. F. Kelley.)

Edward Francis Merrill, New Rochelle, N. Y. A Study of the Modulus of Elasticity of Plain Concrete. (With J. C. Tuttle.)

Henry Franklin Miller, 2d, Wakefield. A Comparative Test of Coal and Coke as Fuel for Boilers. (With B. Reynolds.)

Dean Peabody, Jr., Somerville. A Design of an Absolute Viscometer and the Determination of Absolute Viscosity of Mineral Lubricating Oils. (With N. Ransohoff.)

Henry Chaplin Perley, Boxford. A Study of Steam Distribution and Thermal Efficiency of a Water Gas Plant. (With C. A. Dunkel.)

Alfred Ingersoll Phillips, Jr., Philadelphia, Pa. Design of a Heat Accumulator for a Low Pressure Steam Turbine.

Ralph Albion Drury Preston, Natick. Power Plant Tests and Furnace Temperatures on the Oil-burning S. S Oklahoma. (With M. C. Sherman, J. S. Sneddon, and J. B. Myrick.)

Nathan Ransohoff, Cincinnati, Ohio. A Design of an Absolute Viscometer and the Determination of Absolute Viscosity of Mineral Lubricating Oils. (With D. Peabody.)

Ernest Albert Redman, Lynn. Tests on Reinforced Concrete Beams to Determine the Effect of a Middle Parting. (With H. G. Reynolds.)

Bergen Reynold, Somerville. Comparative Tests of Coal and Coke as Fuel for Boilers. (With H. F. Miller, 2d.)

Herbert Gardner Reynolds, Malden. Tests on Reinforced Concrete Beams to Determine the Effect of a Middle Parting. (With E. A. Redman.)

John Hamilton Ruckman, Sausalito, Cal. Stresses in Open Links.

Earl Simmons Russell, West Hanover. The Effect of Superheated and Saturated Steam on Iron and Steel. (With L. E. Sawyer.)

Luke Eugene Sawyer, Brighton. The Effect of Superheated and Saturated Steam on Iron and Steel. (With E S. Russell.)

Max Christopher Sherman, West Newton. Power Plant Tests and Furnace Temperatures on the Oil-burning S. Oklahoma. (With R. A. D. Preston, J. S. Sneddon, and J. B. Myrick.)

James Stuart Sneddon, Elizabeth, N. J. Power Plant Tests and Furnace Temperatures on the Oil-burning S. S. Oklahoma. (With R. A. D. Preston. M. C. Sherman, and J. B. Myrick.)

Merrill William Tilden, Chicago, Ill. An Investigation of Spray Nozzles. (With H. Lockett.)

Arthur Pierce Truette, Brookline. A Plan for Hydro-Electric Development on the Souhegan River, at Merrimack, New Hampshire. (With G. E. Batcheller, R. L. Fabens, and D. V. Williamson.)

Myrton James Turnbull, Hartford, Conn. A Study of the Heating and Ventilation of the Old Colony Trust Building. (With C. W. Wilson.)

John Culliton Tuttle, Salem. A Study of the Modulus of Elasticity of Plain Concrete. (With E. F. Merrill.)

William Harry Wengert, B.S., Lebanon, Pa. Test of a Steam Vacuum Cleaner.

Donald Voorhis Williamson, Brookline. A Plan for Hydro-Electric Development on the Souhegan River, at Merrimack, New Hampshire. (With G. E. Batcheller, A. L. Fabens, and A. P. Truette.)

Chester Worcester Wilson, Newton. A Study of the Heating and Ventilation of the Old Colony Trust Building. (With M. J. Turnbull.)

COURSE III. MINING ENGINEERING.

Ralph Lincoln Bartlett, Newburyport. Genesis and Occurence of the inc Ores of New Market, Tennessee, with Notes on th Mining Industry.

Braxton Bigelow, Boston. Stamp Mill Run on a Nova Scotia Gold Ore and Tests on a New Classifier Designed by Professor Richards. (With R. E. Burnett.)

Robert Samuel Breyer, Houston, Texas. Concentration of Finely Disseminated Copper in a Lake Superior Sandstone. (With C. C. Webb.)

Chester Jackson Briggs, Newtonville. Concentration Tests on Nova Scotia Tin Ore.

Robert Field Burnett, Chelsea. Stamp Mill Run on a Nova Scotia Gold Ore and Tests on a New Classifier Designed by Professor Richards. (With B. Bigelow.)

Hiram Neil Crichton, Odebolt, Iowa. Pyritic Smelting of a Nickel-Copper Sulphide Ore. (With B. S. Wohlgemuth.)

William Dexter Everett, Dorchester. Coking of a Coal from Warfield, West Virginia. (With W. M. Schofield.)

George Edward Goodspeed, Jr., Roslindale. The Alteration of the Interbedded Lavas of the Roxbury Conglomerate.

Richard Frederic Goodwin, Jr. Stamp Mill Run on a Nova Scotia Gold Ore and Concentration Tests on a Lead-Zinc Ore from Nevada. (With P. S. Hopkins.)

William Burton Hargraves, Jamaica Plain. A Report on the Marsboro Gold Mine and Cyanide Treatment of a Silver Ore from Cobalt, Ontario. (With F. Hurley.)

Paul Stanley Hopkins, Peking, China. Stamp Mill Run on a Nova Scotia Gold Ore and Concentration Tests on a Lead-Zinc Ore from Nevada. (With R. F. Goodwin, Jr.)

Frederick Aloysius Hurley, Dedham. A Report on the Marsboro Gold Mine and Cyanide Treatment of a Silver W. B. Hargraves.)

Raymond Leston Jones, Barnstable. Concentration and Slime Treatment of a Silver Ore from Kerr Lake Mine, Cobalt, Ontario. (With R. L. Jones.) Cyanide Treatment of Amalgamation Tailings. (With P. K. Wadsworth.)

Thomas Avery Roper, Brookfield. The Concentration and Bleaching of Barite Ores from Five Islands, Nova Scotia. (With T. A. Roper.)

Henry Matthais Schleicher, Roxbury. The Concentration and Bleaching of Barite Ores from Five Islands, Nova Scotia. (ith T. A. Roper.)

William McNair Schofield, Newtonville. Coking of Coal from Warfield, West Virginia. (With W. D. Everett.) Samuel Shapira, Boston. The Conversion of Apatite Tailings from Mineville, New York, into Commercial Phosphate Fertilizer.

Yuan Tze Tsai, Huchow, China. Amalgamation and Concentration of a Nova Scotia Gold Ore. (With R. A. Beekman.)

Prescott Kingsley Wadsworth, Eastport, Me. Cyanide Treatment of Amalgamation Tailings. With C. F. Piper.)

Van Court Warren, Los Angeles, Cal. A Report on the Mine of the Providence Coal Mining Company.

Curtis Christopher Webb, Cambridge. Concentration of Finely Disseminated Copper in a Lake Superior Sandstone. (With R. S. Breyer.)

Bert Samuel Wohlgemuth, Youngstown, Ohio. Pyritic Smelting of a Nickel-Copper Sulphide Ore. (With H. N. Crichton.)

COURSE IV. ARCHITECTURE

John Edwin Barnard, Winchester. A Design for an American Automobile and Aeronautic Association.

Philip Weeks Burnham, Waltham. A Design for a City Club House.

Herbert Squires Cleverdon, New York, N. Y. A Design for a Reinforced Concrete Truss.

Walter Swindell Davis, Baltimore, Md. A Design of a Social Centre for the City of Los Angeles, California.

Leander Allen Dow, Spokane, Wash. A Design for a College of Music for a University.

Donald Adams French, Hyde Park. A Design for a Reinforced Concrete Arch Highway Bridge.

Heath Scott Gerity, Denver, Colo. A Design for a Railroad Station in a City of Importance.

Daniel Wilson Gibbs, Waltham. A Design for a Group of Municipal Buildings.

Frederick Augustus Godley, B. A., New York, N. Y. A Design for a Chapel on a Large Country Estate.

Phillip Thomas Harris, Orange. A Design for a Country House of Importance in New England.

Reginald Davis Johnson, A. B., Pasadena, Cal. A Design for a Private Art Gallery in Southern California.

James Bowen Noble, Eau Claire, Wis. A Design for a Reinforced Concrete Chimney.

Joseph Walter Northrup, Jr., A. B., Bridgeport, Conn. A Design for a Terminal Railroad Station.

Bertholf Marsh Pettit, Ph.B., Kenosha, Wis. A Design for the Administration Building of the Massachusetts Institute of Technology with a Plan of New Campus.

Dudley Winston Phelps, Utica, N. Y. (Design for a Memorial to a philanthropist.

John Henry Scarff, Baltimore, Md. A Design for a City Church Inspired by the Monuments of Early Italian Renaissance.

Guy Fiske Shaffer, Seattle, Wash. An Investigation of the Electrolysis of Iron Imbedded in Concrete.

James Theodore Whitney, Wakefield. A Study of the Condensation of Moisture on a Six-inch Concrete Wall.

COURSE V. CHEMISTRY.

Harrison Linwood Clough, B.S., Brockton. The Influence of Moisture upon the Tensile Strength of Leather.

Arthur Richards Dunbar, B.A., West Bridgewater. Classification of Tropical Cane Molasses.

Helen Lillian Fales, South Framingham. An Investigation of Methods for the Determination of Benzoic Acid in Foods.

Ralph Edwin Gegenheimer, Lawrence. A Study of the Ternary Alloys of Silver, Lead and Tin.

Edwin Kenyon Jenckes, Pawtucket, R. I. The Analytical Characterization of Some Recent Dyestuffs.

George Ransom Lord, B.A., Marietta, Ohio. An Investigation into the Effects of Iron-treated and Alum-treated Waters upon Distributing Pipes.

Walter W. Scofield, Jr., A.B., Dalton. The Effect of Ozonized Air upon Milk.

Myron Knight Sweet, Bridgewater. The Detection of Capsicum in Ginger Preparations.

Harry Phillips Trevithick, Ph.B., Middletown, Conn. The Qualitative Analysis of the Coal-tar Colors the Use of which in Foods is Permitted by the Federal Pure Food Regulations.

Lewis William Waters, Orange. A Study of Homogenized Milk.

COURSE VI. ELECTRICAL ENGINEERING.

Hyram Ernest Beebe, B.S., Ipswich, S. Dak. Insulating Oils.

William Thomas Biedler, B.S., Baltimore, Md. The Electrification of the Cotton Mills of the Carolinas.

Reuben Warner Brush, Cambridge, Vt. Tests on Automobile Magnetos. (With G. C. Conner.)

Frederic Karl Castelhun, Newburyport. A Study of a Hydro-Electric Plant at the Stanley Works, Bridgewater Junction, Massachusetts. (With L. N. Downs, Jr.)

George Carlnell Conner, Truro, Nova Scotia. Tests on Automobile Magnetos. (With R. W. Brush.)

Hardy Merrill Cook, Dorchester. Electric Drive in Cotton Mills and Print Works. (With F. T. Crossley.)

Frederick Turner Crossley, Providence, R. I. Electric Drive in Cotton Mills and Print Works. (With H. M. Cook.)

Robert Lincoln Dodge, Wenham. An Investigation of a Gas Electric Power Plant. (With R. W. Perkins.)

Loren Noxen Downs, Jr., Boston. Study of a Hydro-Electric Plant at the Stanley Works, Bridgewater Junction, Massachusetts. (With F. K. Castelhun.)

Ralph Moore George, B.S., Bradford, Pa. Test on a 150 K.W. Direct Current Turbo Generator. (With I. S. Hartman.)

Allen Adams Gould, Newton Upper Falls. Hydro-Electric Development on the Charles River.

Elbert Daniel Greene, Pueblo, Colo. An Inventory and Appraisal of the Property and Equipment of the X. Y. Z. Electric Company.

Arthur Leslie Harding, Medfield. A Project for Hydro-Electric Development at Conway, New Hampshire. (With J. A. Holbrook.)

Ira Samuel Harman, Nashville, Tenn. Test on a 150-kilowatt Direct current Turbo Generator. (With R. W. George.)

Joseph Wood Hathaway, Boston. Concatenation of Induction Motors. Frank Anderson Hayes, M.E., Buffalo, N. Y. The Cost of Electrification of a Trunk Line Railroad. (With D. A. Stoddard.)

Stuart Llewellyn Henderson, Dorchester. The Design of a 12,000-Kilowatt, 66,000-Volt Steam Electric Central Station. (With F. E. Hodges.)

Frank Ernest Hodges, Hyde Park. The Design of a 12,000-Kilowatt, 66,000-Volt Steam Electric Central Station. (With S. L. Henderson.)

John Alder Holbrook, Milton. A Project for Hydro-Electric Development at Conway, New Hampshire. (With A. L. Harding.)

William Henry Horton, Jr., Delavan, Wis. Test of the Plant of the Delavan Electric Light and Power Company.

Edward Somerset Howe, Kington. Tests on the Plant of the Plymouth Electric Light and Power Company. With H. R. Wilbur.)

George Selden Humphrey, Belleville, W. Va. Voltage Regulation of Alternators. (With H. C. Schmidt.)

Edmund Bernard Kiely, Lynn. Cyclic Variation in the Candle Power of Incandescent Lamps.

Fred Richards Lufkin, Woodsford, Me. An Investigation of the Variations of Puncturing Voltage of Cable Insulation with Change of Temperature.

Leonard Morris Lusky, Nashville, Tenn. The Effect of Cross Magnetization on the Commutation of Direct Current Machines.

George Wadsworth McRae, Malden. A Design of an Electrostatic Wattmeter for Measuring Corona Losses. (With F. B. Silsbee.)

John Botume Myrick, West Newton. Power Plant Tests and Furnace Temperatures on the Oil-Burning Steam Ship Oklahoma. (With R. A. D. Preston, M. C. Sherman, and J. S. Sueddons)

Ralph Willis Perkins, Wenham. An Investigation of a Gas Electric Power Plant. (With R. L. Dodge.)

Erford Merton Potter, Taunton. An Investigation of the Advisability of Substituting Electric Motors for the Present Steam Power of the Arnold Shoe Company. (With C. H. Shaw.)

Hermann Charles Schmidt, Richmond, Va. Voltage Regulation of Alternators. (With G. S. Humphrey.)

Carroll Harper Shaw, North Abington. An Investigation of the Advisability of Substituting Electric Motors for the Present Steam Power Plant of the Arnold Shoe Company. (With E. Potter.)

Francis Briggs Silsbee, Lawrence. A Design of an Electrostatic Wattmeter for Measuring Corona Losses. (With G. W. McRae.)

George Thompson Southgate, Nashville, Tenn. A New Type of Constant Current Transformer.

Horace Van Sands Taylor, B.A., Hartford, Conn. Voltage and Current Wave Forms on a Phantom Telephone Line. (With G. W. Wallower.)

Charles William Wallower, Harrisburg, Pa. Voltage and Current Wave Forms on a Phantom Telephone Line. (With H. V. S. Taylor.)

Philip Montgomery Wentworth, Danvers. Tests on a Gas Producer Generating Plant of the Spencer Wire Company, Worcester, Massachusetts. (With M. S. Chapin.)

COURSE VII., BIOLOGY.

Harold Locke Lang, Roslindale. A Quantitative Comparison of the Cellular Contents of Fresh Milk by two Distinct Methods.

Frederick Haskell Stover, Newburyport. An Investigation of the Tidal Discharge and Currents of Beverly Harbor with Reference to the Problem of Sewage Disposal. (With L. G. Rice.)

William Firth Wells, Roslindale. A Study of Some of the Factors which Influence the Straining Action of a Slow Sand Filter.

COURSE IX. GENERAL SCIENCE.

Henry Clifford Colson, Jr., Abington. A Study of the World's Supply of Nitrogen from Economic and Chemical Points of View and in Particular the Possibilities of a Future Supply in the Atmosphere.

Karl Donald Stellwagen, Detroit, Mich. The Protective of Steam Heated Surfaces.

COURSE X. CHEMICAL ENGINEERING.

Charles Almy, Jr., A.B., Cambridge. The Recovery of the Zinc and Ammonia in the Flux Skimmings from Galvanizing Plants.

John Michael Bierer, BS., Cedarville, Va. The Effect of Heat Treatment upon the Structure and Physical Properties of a Low Carbon Nickel Steel.

Dudley Clapp, Dorchester. On the Production of a Flexible Coating for Iron Wire.

Richard Osborne Fernandez, Somerville. A Method for the Determination of Recovered Rubber of Rubber Articles.

Karl Wise Gasch, Ph. D., Dresden, Ohio. A Method for the Removal of Sulphur from Wool Grease.

Raimond Weiss Jacoby, Wilkes-Barre, Pa. Recovery of Zinc from the Waste of Indigo Vats.

William Carruthers Kerr, Catonville, Md. The Separation of Certain Natural Dyestuffs used for Coloring Foods.

Walter Wellington King, New Brighton, N. Y. Study of Thermal Conductivity, both Absolute and during Fire Tests, of Stone Concrete and Cinder Concrete.

George Perkins Lant, Danvers. A Process for the Manufacture of Lactic Acid and Calcium Acid Lactate.

Charles Philip Monto, Rochester, N. Y. Efficiency Test on the Drying Apparatus of a Leather-board Plant at Merrimack, New Hampshire.

James H. O'Brien, B.S., Northfield, Minn. The Efficiency of Open Feedwater Preheaters in Preventing Boiler Corrosion.

Chester Joseph Randall, Waltham. Examination of Molybdenite for the Presence of two Reported New Elements

Clifford Steele Redfield, Nashua, N. H. The Tensile Strength of Glue.

Ludwig Rosenstein, San Francisco, Cal. A Study of Phenolphthalein as an Indicator.

Allen Edward Shippee, East Greenwich, R. I. An Investigation of Some Tests on Wood Oils.

Walter Spaans, Brookline. A Study of the Electrolytic Deposition of Copper.

Horace Eugene Stump, Jr., Chicago, Ill. The Heat Conductivity of Liquids as Determined by their Viscosity.

Richard Raymond Taylor, Lunenburg, Vt. The Effect of Excess Lime upon the Properties of Calcium Carbide.

COURSE XI. SANITARY ENGINEERING.

Fritz Muss Arnolt, B.S., Tuckahoe, N. Y. A Statistical Study of the Cost and Efficiency Sewage.

Earl Huntington Barber, Newton. Design for a Sewage Disposal System at Manchester-by-the-Sea. (With S. A. Malcolm.)

Ralph Warren Horne, Malden. A Study of the Purification of Water by Ozone. (With J. P. Wentworth.)

Irving Patterson Kane, B.S., Long Green, Md. A Design for a Sprinkling Filter.

George Frederick Maglott, Ada, Ohio. An Investigation of the Double Filtration of Sewage at Brockton, Massachusetts.

Sydney Arnold Malcolm, Somerville. Design for a Sewage Disposal System at Manchester-by-the-Sea. (With E. H. Barber.)

William John O'Hearn, Brookline. A Design for a Sewerage System for Danvers, Massachusetts. (With J. Avery, Jr.)

John Henry O'Neill, Lowell. A Study for the Location of an Outfall for the Sewerage System of Gloucester, Massachusetts. (With C. R. Benton and H. F. Parsons.)

Lawrence Grout Rice, Natick. An Investigation of the Tidal Discharge and Currents of Beverly Harbor with Reference to the Problem of Sewage Disposal. (With F. H. Stover.)

Edward Stuart, Boston. An Investigation of the Water Supply of Farmington, Connecticut, with Special Reference to its Sanitary Condition.

John Prescott Wentworth, Malden. A Study of the Purification of Water by Ozone. (With R. W. Horne.)

Theodore Browning Whittemore, New York, N. Y. Collection and Disposal of Refuse in the Roxbury District of Boston.

COURSE XIII. NAVAL ARCHITECTURE.

Maurice Phelps Anderson, Seattle, Wash. A Comparison of the Properties of Actual and Model Propellers.

Van Tuyl Hart Bien, Washington, D. C. Design of a Paddle Wheel Steamer.

Maurice Scott Chapin, Springfield. Tests on a Gas Producer Generating Plant of the Spencer Wire Company, Worcester, Massachusetts. (With P. M. Wentworth.)

Lawrence Boylston Chapman, Norwich, Conn. A Design of a High-Speed Steam Yacht.

Karl Dickson Fernstrom, Norfolk, Va. Comparative Test on Gasoline Carburetters.

Leslie Edward Geary, Seattle, Wash. Design of a Steel Motor Yacht.

Gordon Godshall Holdbrook, Minneapolis, Minn. Power Tests of a Steamer and its Model.

Earl James Wilson Ragsdale, Brookline. Design of a Shallow-draught Gunboat.

French Philbrick Sargeant, Manchester, N. H. An Investigation of a Submerged Exhaust for Motor Boats.

Christopher Avery Schellens, Groton, Conn. Tests of a Labyrinth Packing.

George Smith Thomas, B.S., Carroll, Iowa. An Investigation of Model Propeller Experiments.

COURSE XIV. ELECTROCHEMISTRY.

Earl Russell Hamilton, Roslindale. The Conductivity and Electrolysis of Cuprous Chloride Solutions.

Robert Hamilton Lambard, Ashburnham. On the Equilibrium of the System Consisting of Calcium Cyanide, Calcium Carbide, Carbon and Nitrogen.

Joseph Pease Maxfield, Cambridge. An Experimental Study of an Induction Furnace of the Kjellen Type.

BACCALAUREATE SERVICE

Yesterday afternoon at three thirty the Senior class met in Rogers Corridor and after the stragglers had come in they marched to Trinity Church where the baccalaureate service was held by Dr. Mann.

The text was from St. Luke 17: 19, "Arise, go thy way; thy faith hath made thee whole."

"Those who have considered these words have often been more or less perplexed by the meaning which Christ imparted. They were spoken to the Samaritan who had returned to thank him for his recovery from leprosy. The story of the ten lepers who although they had probably never seen Him before but who had learned of His name, and His compassionate character, waited for Him as he left the village and bowing before Him said, 'Jesus Christ, have mercy on us.' He then tested their faith in a remarkable manner saying, 'Go shew yourselves unto the priests.' They immediately turned and started on their sixty-mile journey to the south to Judea, and on the way their faith was rewarded. They had hardly been out of Christ's sight when the sores dried up and their blood ran pure and clear through their veins and they were made whole.

"All ten had confidence and all were cleansed; but only one was really cleansed in the way that Christ wanted them to be. He wanted to make them whole in the fullest sense of the word. Let us follow the other nine in thought. They go their ways to the priest, and then to their homes, families and society. They all no doubt acknowledge a feeling of gratitude to Christ, but as time goes on by the inevitable process of human nature they try to forget about the whole matter. They say to themselves, "Are we sure that we owe it to Jesus Christ. He did not touch us, and did it not happen naturally. Are we sure that there is a vital connection between Christ and our healing?" And so more and more they stand aloof from Him and take no part in the great argument at the time of the crucifixion, and only call him to mind at times with a feeling of uneasiness and even dislike.

"But now look at the Samaritan who returned. Think of the feeling of gratitude that he had. Think how astounded he must have been when he heard the news of the crucifixion, and how overjoyed at the news of the resurrection. He took a part in the great joy that filled Samaria when the disciples preached there later on. This man alone passed into the heights of fellowship of the church.

"This event is more than a miracle; it is a word illustration of conditions today. Think of the multitudes of men and women who today are enjoying the blessings of Christ's religion and who do not stop to think of whence they came. Modern society looks back to the Romans for its laws and for its philosophy and art to the Greeks, and how about our conception of the worth of man, the reverence for womanhood and children? What of the sympathy that people have for each other in times of distress, and the response of the country to need or suffering. All go back to the life and teachings and the Gospel of Jesus Christ. What are we all doing about it? We some of us confess that we owe for these blessings to Jesus Christ. Some of us talk of moral development, as though they were all a part of a natural process unassisted by any outside power; as though there never was anything to be healed.

"If we take this attitude, we will get Jesus Christ's blessing, but no more. There cannot be in this case the highest possible hope of entering into his high presence. Jesus Christ lives and moves today in the church. He is not dead, and his teaching and examples are doing more today than ever, and He is moulding the thought and actions of nations today more than any other man that ever lived. He invites us all into a closer communion with his purposes.

"Every man of you asks not only that he may get through this world somehow, living his life in ease, but that he may link himself with some great cause, doing good in a general way. Loyalty to Loyalty, is the fine and distinguishing thing about human nature. Lift that phrase and give the name of Jesus Christ.

"Members of the Graduating class of the Massachusetts Institute of Technology, there are many to whom you might have given the high honor to deliver this sermon to you. But I may say that there are not many who could talk to you with more genuine enthusiasm. The Massachusetts Institute of Technology and Trinity Church have always been closely connected with each other ever since the occasion when Huntington Hall was thrown open to us after the great Boston Fire when Trinity Church was burned down. Since that time, with one exception, every baccalaureate sermon to a graduating class of the Institute has been given here. The clergy of the church are glad of it.

"I have no fear that those of you who have earned the certificate of the most famous scientific school in the country will disgrace that name. You are all going to add to that endowment without which any college is poor and with which any college is immeasurably rich, the character of its alumni. I hope for another thing.

"I pray for the allegiance of you all to the Church of Christ, and that you will all make a confession of the gratitude which you owe to Jesus Christ. Take your places in the great forward moral movement; build bridges and design whatever you may undertake well, but take your places in and do your work with the idea of fellowship in the efforts of the church. Doth the Church seem narrow? Then help to make it broad. Give the church the benefit of what you have learned. If you think she is ignorant. Remember that there is one supreme thing that makes life worth living, that is to have taken part in a movement for the general good. And so I think you shall.

"God bless you, every one. Carry on the name of the American gentleman, and the flag of Technology, but also be among the number of men who have seen the growth of the Christian Chuch. You can take your part in that great movement toward the common end."

SENIOR DANCE TONIGHT

The Senior Dance which takes place at Hotel Somerset to-night promises to be the most brilliant social affair that has ever been given by any class at the Institute. The program consists of twenty-four numbers with an intermission between the thirteenth and fourteenth. The committee in charge of the dance are: Harold Lockett, C. C. Hield, and A. A. Gould. The matrons are Mrs. Talbot and Mrs. Rand.

Dancing will begin at 8.30 and will continue until 1.00 P. M. As has been the custom at all Institute affairs, no flowers will be permitted. Jack Martin's orchestra, strengthened by Mr. Kunrich, the musical director of the last Tech Show, who will play first violin, will furnish the music, and as these players are well known for their excellence, and also as everybody knows everybody else, the dance will without doubt be most enjoyable.

CLASS DAY EXERCISES.

(Continued from page 89.)

out into the world with a sound, wholesome respect for our Alma Mater.

Classmates, we owe a great debt to the Institute. She has taken up a raw material, has wrought over us for four long years, and is now ready to turn us out as finished products bearing the stamp of Technology.

Classmates, may we never forget that we are Tech men; may we be ever ready to pledge our loyal support and assistance to our Alma Mater; and, in the future, may the Class of 1910 remain a strong, united body of true Alumni.

The next speaker to be introduced by Mr. Bell was J. S. Sneddon who gave the Class History.

"The Class of 1910 came to Tech 355

JAMES STUART SNEDDON
Class Historian

strong. Some of us fresh from the triumphs of the big Preparatory Schools, walked Boylston Street with an easy nonchalance trying to get acquainted with what was to be our environment for four years to come. Our first introduction was to Rogers and Walker buildings on the days set aside for the Faculty's reception and registration.

"Shortly after school opened, we were coralled into this hall by the Juniors for our first class meeting. We were instructed in the elementary principles of Freshman etiquette. An oration was given by one of the leaders of their class explaining Field Day and how easy it would be to defeat the sophomores, provided we followed to the letter the path as laid out by '08.

On the following evening the Y. M. C. A. entertained us at their annual reception to the entering class. We got our initiation into Tech activities on that night when the leaders for that year told us of their respective organizations.

"After the adoption of a class constitution, we proceeded to the election of our permanent officers. Fitzwater was made president, F. B. Avery, vice-president, Glazier, secretary and Nagle, treasurer.

"We returned in our second year wearing that self-important air which all sophomore classes seem to deem it their duty to assume. We started the ball rolling by electing Tom Lane to the class presidency; vice-president, Harold Lockett; secretary, Curtis Webb, and Duffield acted as treasurer.

"Soon after the second term began, it was time to select the Technique Electoral Committee. This committee was composed of twenty-five men selected by open ballot.

"We returned in September, 1908, with the ranks of our original class well broken up. These vacancies were more than filled by men entering from other colleges.

"The Institute Committee made known its decision at this time in regard to the point system. As a result, 1910 had to look up some new men to fill positions but it was soon found that there was plenty of good untried material. The result of the class elections for the ensuing year were as follows: President, F. D. Stewart; vice-president, P. D. Terry; secretary, W. H. Duffield; treasurer, A. A. Gould.

"What can I say of the Prom? You who were there know; those of you who were not, have heard what a wonderful affair it was. On the screen will be seen the men to whom we were indebted.

"United closer than ever before in our Tech career, the class assembled in Huntington Hall at the start of the fourth year to discuss the plans for the following eight months. Goodwin was made senior president, Gould vice-president, Fitzwater secretary, and Cleverdon was given the custody of the class treasury.

"With the start of the second term which was to be the last lap of our college course, came the notices from Secretary Merrill's office. Thus each man was made acquainted with his position as regards graduation. For most of us from that time until now, it has been one big blur. These were completed, examinations were taken, and then we all sat back to wait for results.

"The celebration which took place on last Thursday night is too recent an affair to be chronicled here and, besides, our ideas of what really did happen might differ too widely, except that John Moxie Fitzwater was unanimously elected Alumni Secretary.

"The history of the class of 1910 does not consist so much in the series of events and incidents which are recorded in the papers and become known to all. Much rather is our history made up of the forming of new associations and friends and the cementing of old ones. While plans for the future are discussed more and more fully as the days slip by, may we repeat in our minds this thought:

"As classmates depart, may each one know
That this lose association has made him grow.
It has made him broader and clearer of sight;
It has taught him life's lesson to search for the right,
A man from the boy of four years ago.
And now though none the same path will take,
This brotherly spirit may we ne'er forsake.
But, as years grow on and we grow old,
May we come back to Old Tech's fold;
Memories to refresh, new friends to make,
May we find as we stay away the longer,
This bond of devotion is ever stronger.
May this feeling o'er each alway hover,
And give 1910 and Tech anot' true lover."

This history was illustrated by lantern slides of class-teams, a group-picture of the class, and charts of statisties of the marks, expenses at home and abroad, etc.

The class prophet, Dudley Clapp, started by apologizing for not having a prophecy, which, he said, had been ordered at Machlachlan's for a month. He was surprised that it had not come since Mach would do anything for a prophet. Just then a covered box was brought in by two boys, who said there was no charge. The speaker commented upon this fact and extolled Mach's generosity when he lifted the cloth and exposed a slot-machine with a large sign, "Insert One Cent."

After considerable difficulty, apparently, Clapp found a penny in his pocket and inserting it received a slip of paper labelled Richard Frederic Goodwin, which read,

"You were born to be a leader; in the lime light you'll be seen
As you juggle trusts and tariff, tell what whisky labels mean."

Seaching all of his pockets and finding a penny in each, the prophet obtained fifteen or twenty similar "prophecies."

John M. Fitzwater received the following:

"Success will crown your efforts,
You will be admired of men,
On you will rest the nation's fate,
You'll manage the affairs of state,
In short you'll be almost as great
As the class of 1910."

Louis Rowe, the "lady-slipper" hero was thus "eulogized":

"As a colonel, no less, you'll be known
in the army.
Your uniforms splendid will surely be
rippers,
And just as of old many hearts you
will shatter,
And still will continue to raise ladies'
slippers."

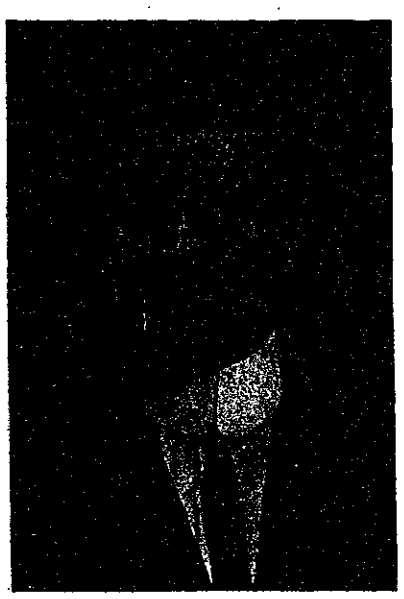
J. P. Maxfield, the prize "grind," had the following on a black-bordered slip:

"He will become a Tech professor.
Requiescat in pace."

H. S. Clevergdon, "senior financier," was thus "stung":

In your destined profession you'll sure
be a winner.
For beside you George Coleman was
just a beginner.

A slip for John Ahlers, president of the Technology Christian Association came, and was opened by the speaker who whistled as he read it but did not see fit to make known its contents to the audience.



DUDLEY CLAPP
Class Prophet

"Although you've been four years at
Tech, you're anxious to be off.
You're going to enter Harvard where
you'll stay and be a prof,"

was found on another slip, but the prophet would not disclose the identity of the man destined for this dire fate.

With considerable joyous anticipation the speaker found a slip upon which was written, "Dudley Clapp," but ran to his seat as he read the following:

"It's easy to prophecy your short ca-
career,
If you bore them much longer, you'll
die now and here."

With great wit and some humor W. M. Schofield presented the distinguished members of the class with sometimes beautiful but in every case appropriate gifts. His spiel ran thus:

"We all know how hard some of us have slaved and burned the midnight oil in order to receive our decree, this last touching tribute which binds us so near to our Alma Mater, its corporation and faculty, and keeps us so far away from its registrar, its bursar and its union lunch. As I look at the faces of my class mates I see marks of worry and care imprinted upon the brows of some, and the scowls and frowns of others who are scheming down in their hearts as to what they shall do to me in case they are called before you upon this platform of honor.

"Will each man whose name is called please come and step upon the platform in order that those in the balconies may see just how good looking he is. Speaking of good-looking men, we have among us one who has both the quality of beauty and the distinction of being an athlete. Never has Technology been *more* proud of one of her loyal sons of the athletic field than she is of this man. Will Mr. B. Jones please rise and come upon the platform.

"Sir, we feel that you have not received sufficient mention for your service on the track team and on account of this it gives me great pleasure to award to you this leather medal, this to be the prize that they would not give you when you succeeded in getting third place while racing against two others in a substitute second team dual meet. Watch and guard it safely so that you may hereafter display it upon your noble chest. That will do.

"In looking over this collection I seem to have a ticket. Is it a ticket to the skating rink? No, it is a ticket to Wellesley. I wonder who this could be for? Ah I have it now. We all remember the man who was asked if he was a suburbanite, because he was seen to board the Wellesley train every evening, and who replied "No, Ah come from Texas." Mr. Breyer please come and get your present.

"A certain young lady at this fair college has told me that you don't seem to visit there quite as often as you used to, and since I know that the expenses of a young man about to graduate from the Institute are quite heavy, I know that you cannot but feel that to receive a free ticket to her home would be the most welcome gift that this class could give to you. What is that? Oh yes, I'll meet you in the gymnasium later. That will do!

"Now since we are bringing the girls into this question, let me go a step further and award this little token to the man who, despite the fact that his studies were a constant source of worry and care, has dared to try to enter into the ranks of the benedicts. He has not only been able to receive the distinction of being a graduate, but also to be a true and faithful fiancee. Will Mr. Curtis Webb please come forward.

"Curtis Christopher Webb, are you going to take this person as thy wedded wife—to have and to hold—for better or for worse—for richer or fo poorer—in sickness and in death, till death do you part? If you are, as we all think you are, let me present you with this $20. license which was sent here to you from the City Hall. Keep it with the wishes of the class that it may be the means of a speedier union than would be the case if you were left to depend upon your own resources. You may go.

"Will the fattest man in the class please rise? Since no one wishes to have that distinction I think we had better force him to it. Will Mr. Rice please come forward.

"Smile for us—that the ladies may all see the dimples. Don't blush. Can you get up the steps all right? Good—this way please. I have special advice from the head of the Civil Engineering department that no young engineer can be successful unless he has the proper amount of flesh to work on. Since too much or too little is detrimental, let us recommend that you use this patent medicine morning and night—each time shaking well before using—until you are able to crawl under the tripod of a transit without upsetting the instrument. And some day when you have achieved your success you will thank us for this little gift and advice. You may be seated.

"We have in our class one member who has been known to make more noise to the square inch than a graphaphone. Will he please come forward. Mr. Ruckman, I mean. Yes, you may talk on your way forward if you think that you have been slighted by the class in not being chosen to orate this afternoon. Now come right up here and talk as much as you want to.

"Well, if you won't do it now it will be your last chance, as I have been instructed to give you this muzzle as a gentle hint and reminder that little boys should be seen and not heard. Keep it with you, and when you feel like making lots of noise and attracting all the attention to yourself—just put it on, and the people around you will be much happier and contented. That will do.

"You all know how many foreigners Technology has the reputation of graduating every year. We have in our class, Mexicans, Spaniards, Cubans, Austrians, Turks, and many others whom the statisticians take pleasure in enumerating. But among them all they seem to pay no attention to two of our number from the Scandinavian Peninsula. Will the following Swedes please come forward—Karl Dickson Fernstrom and Clifford Chase Hield.

"The blonde hair characteristic of that noble race who migrated to Meenasota was never shown to a fairer advantage than here. See the blue eyes, the rosy cheeks, and the happy smiles. Sirs, I take great pleasure in handing you this beautiful engraving of your native land. Study it carefully that you may further appreciate all that your countrymen have done for you, and when you have finished, return it to me. You may be seated.

"Among the members of this class who are graduating as mining engineers we have one individual who has distinguished himself by the wonderful thesis that he has written. As you all know, a thesis is a work done wholly by the student with a view towards either making some new revelation to science, or else upsetting the present laws of nature. Will Mr. Goodspeed, Course III, please come forward. One glance at that noble head would be enough to convince a layman of the wonderful investigating powers which lie within it.

"Ladies and gentlemen, this man has proved to science that the wonderful deposits of copper found in Back Bay, which rival so closely the similar foundations of the Calumet and Hecla properties, were found by lateral secretion and not by longitudinal eruption. Mr. Goodspeed, it gives me great pleasure to praise you for this noble work, and since we think that those wonderful facilities of individual research should not lie dormant within that noble pate, we wish to present you with this cobblestone, in order that you may investigate it for the purpose of discovering the genesis of the cobbles. That will do.

"Classmates, did you ever hear the lady's remark when informed that you were a student at Tech, "Oh my! but you must have to work hard." Yes, that expression is as common as the other stock remarks about the lovely music, the slippery floor, and pretty decorations of the dance hall gossip. In other words, it is said that the Tech man is a "grind;" yet we all know how little some of us have done when compared with the conscientious work of the real Tech grind. "Will Mr. Ralph Albion Drury Preston please come forward. Note the nervous and hesitating step so characteristic of this type of man. His mind is not upon the ordinary events of life, but rather deep in the mysteries of intention and differentiation.

"Mr. Preston, that you may not neglect this unceasing toil, let me present you with this wonderful antique grindstone which will help you to keep that noble brain ever sharpened to meet the future exigencies of the mechanical engineer. Or in plain English, 'Grind, brother, grind!' You may be seated.

"Since the election of the new president of the Massachusetts Institute of Technology many things which have remained unfinished up to this time have been pushed forward with great zeal. Among these points might be mentioned the question of a new location for Tech, the adoption of a scholarship honorary society, and the inauguration of a Tech crew. These things have been thoroughly investigated and are now well underway toward completion. During all this time the student body itself has taken up the question of the adoption of the honor system for examinations, the most distinguished representative of which body being Mr. R. F. Goodwin, Jr., president of this class. Will he please come forward.

"Mr. Goodwin, the students of Tech desire me to thank you for your sincere work in this question, and we all

WILLIAM McNAIR SCHOFIELD
Presentation Orator

hope that at some future time the honor system may be adopted here. But lest you leave us with the idea that you have inaugurated this system, let me present you with the vote of the student body. You may be seated.

"You have all heard the statistics of this class by our historian and have heard him enumerate the long man and the short man, the old man and the young man; but without having seen some of these men you are unable to fully appreciate the virtues of each. In order to show you what a childish engineer looks like I would like to have you gaze upon the infant face of Mr. T. B. Whittemore. Will he please come

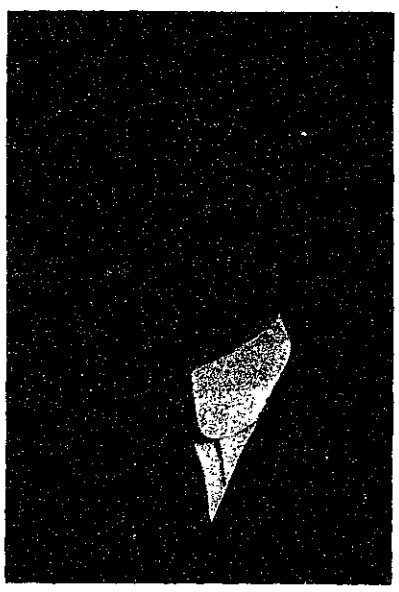
forward. Note the peachy complexion, the cherry lips, and the infant smile of the child in arms. One would think to look at him that he was really an infant prodigy.

"Mr. Whittemore, as a little souvenir from your classmates, let me present you with this little drinking fountain in order that you may not too quickly leave the ranks of the children just because you have been told by the faculty that you are educated. Use it freely, and when you have been awarded your degree to-morrow run along to the nursery and celebate your graduation by indulging in drink. That will do.

"Since we have been making these gifts too personal and kept the ladies too much out of the discussion, I would like to award a little remembrance to one of our number who has also succeeded in keeping strong with his lady friend. Will Mr. O'Hearn come and take his medicine.

"Mr. O'Hearn, I have been told by many of your classmates that you are very fond of rabbits. I am sure I do not know what it is that they allude to, but in looking over my little Santa Claus collection I see this white bunny. I had some doubt at first if it could have been for you, but since I can see much giggling in a certain part of this audience of the fair sex, I am convinced that it must be for you. Take it and caress it, so that you may keep in good practice for the real Bunny. You may be seated.

"Now, ladies and gentlemen, since I have hinted at the fair sex so often, perhaps it would be apropos to the occasion to show you just what the Institute can turn out in the line of an engineeress. Will Miss Helen Fales please do me the honor to come and stand by my side. Helen, dear, I know that you appear lonely as you are coming up here by yourself, and so I think that I had better summon your soul-classmate to help you out. Mr. Jenckes, will you please come and assist her.



BERGEN REYNOLDS
Gift Orator

"Ladies and gentlemen, here you see before you two kindred spirits—they work together—they play together—they cook together and sew together. To best appreciate this loving couple, you should stand in chemical laboratory some morning when they meet. The conversation goes something like this:

"She—'Greetings, Eddie.'

"He—'Oh, you kid!'

"She—'Did you study your phenolphthalein last night?'

"He—'Oh, I think that hat is awfully cute!'

"Mr. Jenckes, we all think you have done very well to keep up in your studies and at the same time to keep up your spooning, and as a present from your classmates, we want you to take this sparkler, and when you have the courage or the nerve, see if you can't persuade Helen—Oh you Helen—to accept it. You may be seated.

"Gentlemen, as I must take a train in five minutes for Chicago, we must close; but all those who have been favored, and who would like to thank me, can reach me by wire at the 'Annex.'"

After the merriment occasioned by Mr. Schofield's speech had abated B. Reynolds, the gift orator presented the Institute with the gift from the class, a combination reflectoscope and stereoptican. Mr. Reynolds speech was as follows:

"For the last few years it has been customary for the Senior Class to present to the Institute some gift by which it may be remembered.

The gift of last year's class was four handsome divans for the Living Room. the Class Gift, after considering very carefully the needs of the Union, decided upon a piece of apparatus of most modern type, with its most approved attachment. With these adjuncts it is hoped that the Friday evening entertainments will prove more popular.

Therefore, on behalf of the Class of 1910 it gives me great pleasure to announce to the friends of the Institute that this year's Senior Class presents the Technology Union with a stereoptican lantern.

After the end of the last speech the Seniors and their guests adjourned to the lawn where the class spread was opportunity for the graduating classes to bestow upon it their favor. Two years ago the Class of 1908 presented the Union with suitable furniture for served. Following the precedent set by the last year's graduating class there was no class orator.

The spread was served by caterers Burleigh, and the music was furnished by a ten-piece brass band conducted by Mr. Martin. The ushers both for the exercises and for the spread were the following men selected from the Junior Class.

W. C. Salisbury, S. Copeland, L. Cooley, J. W. Wilson, D. Stevens, R. Gould, R. H. Ranger, S Kimball, P. D. White, H D. Billings.

The party broke up at 5 P M. amid cheers, songs and handshakes the crowds departed.

CLASS GIFT

The gift of the senior class to the Institute is a Thomas Reflectoscope, with a complete set of projection attachments. The machine will be placed in the union permanently, and will naturally lend much to the entertainments to be given there.

Besides the ordinary lantern slide projection, the machine is equipped for horizontal and vertical opaque projection. This makes it possible to project all sorts of apparatus, solids, or experiments as well as plates and pictures directly from books. For example the vertical opaque projection could be used to show the action going on in a liquid in a tray.

The electric arc which is the source of light is connected through an adjustable rheostat, which makes possible a variation of the intensity of light according to the density of the object.

The lantern is equipped with every convenience of speedy operation.